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EXAMINER	
YODICHKAS, ANEETA	

ART UNIT	PAPER NUMBER
2627	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/557,292	KAYAMA ET AL.	
	Examiner	Art Unit	
	Aneeta Yodichkas	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-20** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,950,378 B1 to *Miyazaki et al.*

As to **claim 1**, *Miyazaki* discloses an optical disk apparatus comprising: a light source (3) (Fig. 2, column 12, line 50); an objective lens for converging light emitted from the light source toward an optical disk (Fig. 2, column 14, lines 57-62), where the pickup (2) has an objective lens; a first photodetection device (5) for detecting reflected light from the optical disk and outputting a first signal (Fig. 2, column 12, lines 50-56), where photodetector (5) receives the reflected light from the disc; a signal processing section (22) for receiving the first signal and generating a signal containing information recorded on the optical disk (Fig. 2, column 13, lines 37-44), signal processing section (22), where the signal processing section (22) receives light from the photodetector (5); a second photodetection device (4) for detecting a portion of the light emitted from the light source (3) and outputting a second signal (Fig. 2, column 12, lines 50-53), where the photodetector (4) detects the light emitted from laser (3); a light source driving section (8) for receiving the second signal, and based on the second signal, driving the light source so as to emit the light at an output power of the light source (3) which equals a target value (Fig. 2, column 13, lines 10-18), where the light source driving

section or emitted light control section (8) controls the output power of the laser (3); and an amplitude fluctuation detection section (10) for detecting an amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds a predetermined value, changing driving characteristics of the light source driving section (Fig. 2, column 13, lines 51-65), where wobble amplitude detector (10) detects the fluctuation of the signal and the reflected light control section (12) controls the driving current to the light source.

As to **claim 2**, *Miyazaki* discloses the optical disk apparatus, wherein the light source driving section (8) includes a current control section for receiving the second signal and generating a driving current which is controlled so that the output power of the light source equals the target value, and a high-frequency module for modulating the driving current with a predetermined frequency and oscillation power (Fig. 2, column 13, lines 15-28), where the light source driving section or emitted light control section (8) generates drive currents to control the laser power.

As to **claim 3**, *Miyazaki* discloses the optical disk apparatus, wherein the amplitude fluctuation detection section detects the amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds the predetermined value, changes a modulation frequency of the high-frequency module (Fig. 2, column 26, lines 45-49), where the frequency is varied when the power level detected is varied.

As to **claim 4**, *Miyazaki* discloses the optical disk apparatus, wherein the amplitude fluctuation detection section (10) detects the amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds the predetermined

value, changes an oscillation power of the high-frequency module (Fig. 2, column 13, lines 51-65), where the amplitude detector (10) detects the fluctuation amount and based the detected signal from detector (10), the reflected light control section (12) changes the power of laser (3).

As to **claim 5**, *Miyazaki* discloses the optical disk apparatus, wherein the current control section (8) generates the driving current based on a predetermined frequency component of the second signal, and the predetermined frequency component is approximately 1/10 or less of a frequency of the first signal (Fig. 2, column 13, lines 10-28), where the current control section or emitted light control section (8) generates current based on the second detector (4).

As to **claim 6**, *Miyazaki* discloses the optical disk apparatus, wherein the amplitude fluctuation detection section detects the amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds the predetermined value, changes the target value in the current control section (Fig. 2, column 13, lines 10-28), where the emitted light control section (8) detects the amplitude fluctuation and changes the current based on this value.

As to **claim 7**, *Miyazaki* discloses the optical disk apparatus, wherein the amplitude fluctuation detection section (10) receives the first signal, and based on the first signal, detects an amplitude fluctuation amount of a component of the second signal that is in synchronization with the first signal (Fig. 2, column 14, lines 10-15), where the amplitude detector (10) receives the first signal from detector (5) and the first

and second signals, which come from reflected light control section (12) and emitted light control section (8), respectively, and the signals are synchronized in switch (9).

As to **claim 8**, *Miyazaki* discloses the optical disk apparatus, wherein the amplitude fluctuation detection section (10) includes a high-pass filter, and detects the amplitude fluctuation amount of the second signal having passed through the high- pass filter (Fig. 6, column 17, lines 27-30), where band pass filter (41) consists of a high-pass and low-pass filter and it detects the amplitude fluctuation as it is part of amplitude detector circuit (10).

As to **claim 9**, *Miyazaki* discloses the optical disk apparatus, wherein the amplitude fluctuation detection section changes an oscillation power in accordance with the type of the optical disk (Fig. 2, column 13, lines 51-61), where disc type is determined based on the detected amplitude and the power is changed by the reflected light control section (12).

As to **claim 10**, *Miyazaki* discloses an information recording/reproduction method by an optical disk apparatus including: a light source; an objective lens for converging light emitted from the light source toward an optical disk; a first photodetection device for detecting reflected light from the optical disk and outputting a first signal; and a signal processing section for receiving the first signal and generating a signal containing information recorded on the optical disk, the information recording/reproduction method comprising: a step of detecting a portion of the light emitted from the light source (3) and outputting a second signal (Fig. 2, column 12, lines 50-53), where the photodetector (4) detects the light emitted from laser (3); a step of receiving the second signal, and based

on the second signal, driving the light source so as to emit the light at an output power of the light source (3) which equals a target value (Fig. 2, column 13, lines 10-18), where the light source driving section or emitted light control section (8) controls the output power of the laser (3); and a step of detecting an amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds a predetermined value, changing driving characteristics in the step of driving the light source (Fig. 2, column 13, lines 51-65), where wobble amplitude detector (10) detects the fluctuation of the signal and the reflected light control section (12) controls the driving current to the light source.

As to **claim 11**, *Miyazaki* discloses the information recording/reproduction method, wherein the step of driving the light source (3) includes a step of receiving the second signal and generating a driving current which is controlled so that the output power of the light source equals the target value, and a step of modulating the driving current with a predetermined frequency and oscillation power (Fig. 2, column 13, lines 15-28), where the light source driving section or emitted light control section (8) generates drive currents to control the laser power.

As to **claim 12**, *Miyazaki* discloses the information recording/reproduction method, wherein the step of changing the driving characteristics detects the amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds the predetermined value, changes a modulation frequency in the modulation step (Fig. 2, column 26, lines 45-49), where the frequency is varied when the power level detected is varied.

As to **claim 13**, *Miyazaki* discloses the information recording/reproduction method, wherein the amplitude fluctuation detection section (10) detects the amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds the predetermined value, changes an oscillation power of the high-frequency module (Fig. 2, column 13, lines 51-65), where the amplitude detector (10) detects the fluctuation amount and based the detected signal from detector (10), the reflected light control section (12) changes the power of laser (3).

As to **claim 14**, *Miyazaki* discloses the information recording/reproduction method, wherein the step of driving the light source (3) executes a step of generating the driving current based on a frequency component of the second signal, the predetermined frequency component being approximately 1/10 or less of a frequency of the first signal (Fig. 2, column 13, lines 10-28), where the current control section or emitted light control section (8) generates current based on the second detector (4).

As to **claim 15**, *Miyazaki* discloses the information recording/reproduction method, wherein the step of changing the driving characteristics detects the amplitude fluctuation amount of the second signal, and if the amplitude fluctuation amount exceeds the predetermined value, changes the target value in the step of generating the driving current (Fig. 2, column 13, lines 10-28), where the emitted light control section (8) detects the amplitude fluctuation and changes the current based on this value.

As to **claim 16**, *Miyazaki* discloses the information recording/reproduction method, wherein the step of changing the driving characteristics receives the first signal, and based on the first signal, detects an amplitude fluctuation amount of a component

of the second signal that is in synchronization with the first signal (Fig. 2, column 14, lines 10-15), where the amplitude detector (10) receives the first signal from detector (5) and the first and second signals, which come from reflected light control section (12) and emitted light control section (8), respectively, and the signals are synchronized in switch (9).

As to **claim 17**, *Miyazaki* discloses the information recording/reproduction method, wherein the step of changing the driving characteristics further includes a step of removing a low-range component from the second signal, and detects the amplitude fluctuation amount of the signal from which the low-range component has been removed (Fig. 6, column 17, lines 27-30), where band pass filter (41) removes the low-range frequency from the signal and it detects the amplitude fluctuation as it is part of amplitude detector circuit (10).

As to **claim 18**, *Miyazaki* discloses the information recording/reproduction method, wherein the step of changing the driving characteristics changes an oscillation power in accordance with the type of the optical disk (Fig. 2, column 13, lines 51-61), where disc type is determined based on the detected amplitude and the power is changed by the reflected light control section (12).

As to **claim 19**, *Miyazaki* discloses the optical disk apparatus, comprising a servo control section (17) which generates a focusing signal and a tracking signal based on the first signal, in order to move the objective lens along a focusing direction and a tracking direction to radiate a light beam onto a track of the optical disk (Fig. 2, column 14, lines 57-65), where servo (17) performs both focusing and tracking control.

As to **claim 20**, *Miyazaki* discloses the optical disk apparatus, wherein the light source is a laser (3), and the light source driving section (8) controls the output power of the laser by modulating a current which drives the laser based on the second signal so as to equal the target value (Fig. 2, column 13, lines 10-18), where light source (3) is a laser and the power is adjusted by modulating the current by emitted light control section (8).

Response to Arguments

3. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aneeta Yodichkas whose telephone number is (571) 272-9773. The examiner can normally be reached on Monday-Thursday 8-5, alternating Fridays, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/
Primary Examiner, Art Unit 2627

/A.Y./
5/13/09